



**Pacific Gas and  
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PG&E Letter DIL-15-015

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Docket No. 72-26, Materials License No. SNM-2511  
Diablo Canyon Independent Spent Fuel Storage Installation  
Diablo Canyon Independent Spent Fuel Storage Installation Thirty Day Report  
Required by Technical Specification 2.2.C

Dear Commissioners and Staff:

Diablo Canyon Independent Spent Fuel Storage Installation Technical Specification (TS) 2.2.c, requires a report to be submitted within 30 days after fuel specifications, or loading conditions of TS 2.1, are not met. The enclosure provides the 30-day report which includes the cause of the violation, actions taken to restore compliance, and prevent recurrence.

Pacific Gas and Electric Company (PG&E) will implement corrective actions in accordance with the Diablo Canyon Power Plant Corrective Action Program.

PG&E makes no new or revised regulatory commitments (as defined by NEI 99-04) in this letter.

If there are any questions or if additional information is needed, please contact Lawrence Pulley at 805-545-6165.

Sincerely,

Barry S. Allen

APH8/6470/50706314

Enclosure

cc: Diablo Distribution

cc/enc: Marc L. Dapas, NRC Region IV Administrator

Thomas R Hipschman, NRC Senior Resident Inspector

John M. Goshen, P.E., NMSS Project Manager

Enclosure  
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**Diablo Canyon Independent Spent Fuel Storage Installation Thirty Day Report**  
**Required by Technical Specification 2.2.C**

### **Event Description**

On June 6, 2015, during a review of the Independent Spent Fuel Storage Installation (ISFSI) cask loading calculations, plant personnel discovered that for two casks, preferential loading requirements were not met during uniform loading as required by ISFSI Technical Specification (TS) 2.1.2, "Uniform and Preferential Fuel Loading." Event Notification (EN) 51134 was made at approximately 20:19 Pacific Time.

Upon completion of a full extent of condition review, Pacific Gas and Electric Company (PG&E) determined the condition affected 19 of the 34 loaded casks in the Diablo Canyon ISFSI. The original EN was updated to reflect the new information on June 9, 2015.

Engineering performed an evaluation and determined that all the fuel and the casks remain in a safe and analyzed condition.

### **Cause of the Violation**

The root cause is that Reactor Engineering personnel designed the dry cask loading patterns with the mindset that decay heat was the primary concern in determining locations of individual assemblies in the cask. While TS 2.1.2 specifies that "fuel assemblies with the longest post-irradiation cooling times shall be loaded into fuel storage locations at the periphery of the basket," the reactor engineers misinterpreted this to mean assemblies with low decay heat and did not use post-irradiation cooling time as the applicable criterion. This misunderstanding overrode the review of the procedure and calculations, and the discussion of loading criteria, including cooling time, that occurred in the technical pre-job brief prior to performing this task.

### **Corrective Actions**

#### **Immediate Corrective Actions:**

- (1) PG&E provided just-in-time training to the Reactor Engineering staff involved with the cask calculations regarding the application of the ISFSI TS for preferential loading.
- (2) PG&E revised station procedure for cask loading to add an independent third party review, evaluated the sequence of steps, and included acceptance criteria for preferential loading.
- (3) PG&E ensured compliance with uniform and preferential loading requirements for remaining casks in the loading campaign.

- (4) PG&E completed extent of condition evaluation for first four cask loading campaigns for compliance with TS paragraph 2.1.2.

Corrective Action to Prevent Recurrence

PG&E will revise the station procedure for loading plan design to clarify post-irradiation cooling time requirements versus decay heat requirements.

Actions Taken to Restore Compliance

PG&E will revise the Diablo Canyon ISFSI TS to be consistent with Holtec Standard TS, which no longer includes preferential loading provisions.